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17831 U.S. PTO

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PTO/SB/05 (4/98)

Approved for use through 09/30/2000. OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new non-provisional applications under 37 C.F.R. § 1.53(B))

Attorney Docket No.	M419.12-0043
First Inventor or Application Identifier	Benjamin Y.H. Liu et al.
Title	HIGH-PERFORMANCE VAPORIZER FOR LIQUID-PRECURSOR AND MULTI-LIQUID-PRECURSOR VAPORIZATION IN SEMICONDUCTOR THIN FILM DEPOSITION
Express Mail Label No.	EV388908754US

**APPLICATION ELEMENTS**  
See MPEP chapter 600 concerning utility patent application contents.**Address To:**  
Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

1. ☒ \*Fee Transmittal Form e.g., PTO/SB17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant Claims small entity status
3. ☒ Specification [Total Sheets **34**]  
(preferred arrangement set forth below)  
- Descriptive title of the Invention)  
- Cross References to Related Applications  
- Statement Regarding Fed sponsored R & D  
- Reference to Microfiche Appendix  
- Background of the Invention  
- Brief Summary of the Invention  
- Brief Description of the Drawings (if filed)  
- Detailed Description  
- Claim(s)  
- Abstract of the Disclosure

7. ☐ CD-ROM or CD-R in duplicate, large table of  
Computer program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(If applicable, all necessary)
- a. ☐ Computer Readable Copy
- b. Specification Sequence Listing on:  
i. ☐ CD-ROM or CD-R (2 Copies); or  
ii. ☐ Paper
- c. ☐ Statement verifying identity of above copies

4. ☒ Drawing(s) (35 U.S.C. § 113) [Total Sheets **8**]
5. Oath or Declaration [Total Sheets **3**]
- a. ☒ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 C.F.R. § 1.63(d))  
(for continuation/divisional with Box 18 completed)
- i. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting  
inventor(s) named in the prior application,  
see 37 C.F.R. §§1.63(d)(2) and 1.33(b).

6. ☒ Application Data Sheet. See 37 CFR 1.76

**ACCOMPANYING APPLICATION PARTS**

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 C.F.R. § 3.73(b) Statement ☒ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO – 1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request Under 35 USC 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent
17. ☐ Other:

18. If a **CONTINUING APPLICATION**, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation –in part (CIP)

of prior application No: \_\_\_\_\_ /

Prior application information:

Examiner \_\_\_\_\_

Group/Art Unit: \_\_\_\_\_

**FOR CONTINUATION or DIVISIONAL APPS only:** The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**17. CORRESPONDENCE**☐ Customer Number or Bar Code Label

(Insert Customer No. or Attach bar code label here)

or ☒ Correspondence address below

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Name (Print/type)	Nickolas E. Westman	Registration No. (Attorney/Agent)	20,147
Signature		Date	1/30/04

FEE TRANSMITTAL		Complete if Known																																																																																																																																			
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1. <input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fee required under 37 C.F.R. § 1.16 and 1.17, including any petition fee, and credit any over payments to Deposit Account No. <u>23-1123</u> . Westman, Champlin & Kelly, P.A.  2. <input checked="" type="checkbox"/> PTO Form-2038 Enclosed		<b>3. ADDITIONAL FEES</b>  <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Code</th> <th>Fee (\$)</th> <th>Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr> <td>1051</td> <td>130</td> <td>2051</td> <td>65</td> <td>Surcharge - Late filing fee or oath</td> <td></td> </tr> <tr> <td>1052</td> <td>50</td> <td>2052</td> <td>25</td> <td>Surcharge - Late provisional Filing Fee or cover sheet</td> <td></td> </tr> <tr> <td>1053</td> <td>130</td> <td>1053</td> <td>130</td> <td>Non-English specification</td> <td></td> </tr> <tr> <td>1812</td> <td>2,520</td> <td>1812</td> <td>2,520</td> <td>For Filing a Request for Reexamination. (ex parte)</td> <td></td> </tr> <tr> <td>1251</td> <td>110</td> <td>2251</td> <td>55</td> <td>Extension for reply within first month</td> <td></td> </tr> <tr> <td>1252</td> <td>420</td> <td>2252</td> <td>210</td> <td>Extension for reply within second month</td> <td></td> </tr> <tr> <td>1253</td> <td>950</td> <td>2253</td> <td>475</td> <td>Extension for reply within third month</td> <td></td> </tr> <tr> <td>1254</td> <td>1,480</td> <td>2254</td> <td>740</td> <td>Extension for reply within fourth month</td> <td></td> </tr> <tr> <td>1255</td> <td>2,010</td> <td>2255</td> <td>1,005</td> <td>Extension for reply within fifth month</td> <td></td> </tr> <tr> <td>1402</td> <td>330</td> <td>2402</td> <td>165</td> <td>Filing a brief in support of an appeal</td> <td></td> </tr> <tr> <td>1403</td> <td>290</td> <td>2403</td> <td>145</td> <td>Request for oral hearing</td> <td></td> </tr> <tr> <td>1814</td> <td>110</td> <td>2814</td> <td>55</td> <td>Terminal Disclaimer Fee</td> <td></td> </tr> <tr> <td>1452</td> <td>110</td> <td>2452</td> <td>55</td> <td>Petition to Revive - unavoidable</td> <td></td> </tr> <tr> <td>1453</td> <td>1,330</td> <td>2453</td> <td>665</td> <td>Petition to Revive - unintentional</td> <td></td> </tr> <tr> <td>1501</td> <td>1,330</td> <td>2501</td> <td>665</td> <td>Utility/Reissue issue fee (inc. advance copies)</td> <td></td> </tr> <tr> <td>1502</td> <td>480</td> <td>2502</td> <td>240</td> <td>Design issue fee (inc. advance copies)</td> <td></td> </tr> <tr> <td>1460</td> <td>130</td> <td>1460</td> <td>130</td> <td>Petitions to the Commissioner</td> <td></td> </tr> <tr> <td>1807</td> <td>50</td> <td>1807</td> <td>50</td> <td>Petitions related to provisional applications</td> <td></td> </tr> <tr> <td>1806</td> <td>180</td> <td>1806</td> <td>180</td> <td>Submission of Information Disclosure Statement</td> <td></td> </tr> <tr> <td>8021</td> <td>40</td> <td>8021</td> <td>40</td> <td>Recording each patent assignment per property (times number of properties)</td> <td>40</td> </tr> </tbody> </table>		Large Entity		Small Entity		Fee Description	Fee Paid	Code	Fee (\$)	Code	Fee (\$)	1051	130	2051	65	Surcharge - Late filing fee or oath		1052	50	2052	25	Surcharge - Late provisional Filing Fee or cover sheet		1053	130	1053	130	Non-English specification		1812	2,520	1812	2,520	For Filing a Request for Reexamination. (ex parte)		1251	110	2251	55	Extension for reply within first month		1252	420	2252	210	Extension for reply within second month		1253	950	2253	475	Extension for reply within third month		1254	1,480	2254	740	Extension for reply within fourth month		1255	2,010	2255	1,005	Extension for reply within fifth month		1402	330	2402	165	Filing a brief in support of an appeal		1403	290	2403	145	Request for oral hearing		1814	110	2814	55	Terminal Disclaimer Fee		1452	110	2452	55	Petition to Revive - unavoidable		1453	1,330	2453	665	Petition to Revive - unintentional		1501	1,330	2501	665	Utility/Reissue issue fee (inc. advance copies)		1502	480	2502	240	Design issue fee (inc. advance copies)		1460	130	1460	130	Petitions to the Commissioner		1807	50	1807	50	Petitions related to provisional applications		1806	180	1806	180	Submission of Information Disclosure Statement		8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40
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Signature Nickolas E. Westman  
(Nickolas E. Westman)

Date 1/30/04

Reg. No. 20,147

Deposit Account No. 23-1123